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Patent Abstracts of Japan

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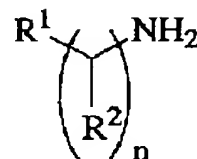
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APPLICANT : SUMITOMO CHEM CO LTD;

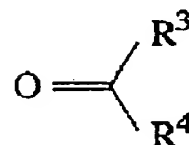
INVENTOR : HARADA ETSUKO;

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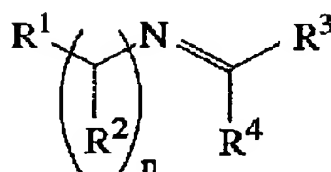
TITLE : PRODUCTION OF IMINES



I



II



III

ABSTRACT : PROBLEM TO BE SOLVED: To rapidly produce imines, capable of preventing reactional apparatuses, etc., from corroding without producing a corrosive acidic substance during reaction and useful as intermediates for medicines and agrochemicals in high yield by condensing primary amines with ketones in the presence of a titanium alkoxide as a catalyst.

SOLUTION: (A) Primary amines of formula I [R¹ and R² are each H, an alkyl, an aryl, pyridyl or furyl; (n) is 0 or 1] (e.g. α-methylbenzylamine) are reacted with (B) ketones of formula II (R³ and R⁴ are each an alkyl, an aryl, pyridyl or furyl) (e.g. benzophenone) in the presence of a titanium alkoxide (e.g. titanium tetraisopropoxide) as a catalyst to afford the objective imines of formula III (e.g. N-diphenylmethyldene-α-phenylethylamine). For example, the component (B) is used in a molar amount of preferably 0.95-1.05 times based on the component (A) and the condensing reaction is preferably carried out at 50-150°C for 1-10hr.

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